Staff Proposed Radon Amendment to Appendix F in the IRC 2009 (note no significant changes noted in IRC 2012):

780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS

780 CMR 51.00 MASSACHUSETTS RESIDENTIAL CODE

MASSACHUSETTS AMENDMENTS TO THE *INTERNATIONAL RESIDENTIAL CODE 2009*

51.00 continued

R101.1.1 Replace "F" with "E" and replace "G" with "F".

. . .

APPENDIX F – RADON CONTROL METHODS: Delete "Reserved."

AF101.1 Replace as follows:

> **AF101.1 General** This appendix contains minimum passive radon control requirements for all new construction in the high radon potential counties as shown in Zone 1 of Figure AF101 regardless of the radon levels at the site. Alternatively, the passive system requirements of ANSI/AARST Standard Designation #CCAH: "Reducing Radon in New Construction of One & Two Family Dwellings and Townhouses" 2013 may be used for new construction in Zone 1, or approved equal system.
>
> No testing is required:
> - for the radon levels at the site prior to construction;
> - for the radon control system when completed; or
> - in the building after completion of the project.
>
> Therefore, such testing shall not be a condition of issuing a Certificate of Occupancy.

AF103.1 Delete the last sentence. See separate file for amended Figure AF-102.

AF103.2 Add a second sentence to subparagraph 2. as follows:

> The geotextile matting shall have a cross sectional area of at least 12-square inches. It shall be designed to facilitate lateral transporting of soil

gases to the collection point and shall be placed no closer than 12-inches around the interior of the foundation perimeter.

Add a second sentence to subparagraph 3. as follows:

A four inch perforated pipe embedded in a 50 square inch bed of gravel as specified in Item 1. above and shall be no closer than 12-inches around the interior of the foundation perimeter.

. . .

AF103.3 Add the following at the end of the paragraph:

The sheeting shall be sealed to the perimeter footing or wall with an ASTM C290 class 25 or higher sealant or equal. Under-slab insulation, if used, shall be placed on top of the sheeting.

. . .

AF103.4.3 Delete and replace as follows:

AF103.4.3 Foundation and condensate drains. Foundation and condensate drains below the gas retarder area shall be isolated from the gas collection area by plumbing traps or routed through non-perforated pipe.

. . .

AF103.5.2 Add at the end of the last sentence: " , and shall extend upward six inches and be sealed to the wall with an ASTM C290 class 25 or higher sealant or equal."

AF103.5.3 Replace the first sentence as follows:

The soil gas venting pipe system shall consist of two five-foot long pieces of perforated pipe laid horizontally in a 50 square inch gravel trench and inserted into the opposing horizontal legs of a piping T-fitting with the vertical leg of the fitting penetrating the sheeting. The gravel shall be as specified in AF103.2, paragraph 1. The vertical leg of the t-fitting shall connect to a 3-inch diameter vertical vent pipe.

AF103.6. Add between the second and third sentence the following:

1

Each horizontal leg of the T-fitting shall be connected to:

- two five-foot long pieces of perforated pipe laid horizontally in the gravel,
- or to the geotextile matting loop,
- or to the perforated pipe trench loop.

The connection shall be constructed to facilitate gas flow from the sub-slab system.

. . .

AF103.12 Delete

Figure AF 102 Replace Figure AF 102 as follows:

See separate file.

End of Proposed Amendment
Reference Information: